



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/514,312	02/28/2000	Takahide Kasai	31671-157328RK	8281

26694 7590 10/22/2002

VENABLE, BAETJER, HOWARD AND CIVILETTI, LLP  
P.O. BOX 34385  
WASHINGTON, DC 20043-9998

EXAMINER
----------

DI NOLA BARON, LILIANA

ART UNIT	PAPER NUMBER
----------	--------------

1615

DATE MAILED: 10/22/2002

19

Please find below and/or attached an Office communication concerning this application or proceeding.

# BEST AVAILABLE COPY

<b>Office Action Summary</b>	<b>Applicant(s)</b>	
	KASAI ET AL.	
	<b>Applicati n No.</b>	
	09/514,312	
	<b>Examiner</b>	<b>Art Unit</b>
	Liliana. Di Nola-Baron	1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 September 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 40-58 is/are pending in the application.
- 4a) Of the above claim(s) 45-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 40-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

## DETAILED ACTION

### *Election/Restrictions*

1. Newly submitted claims 45-58 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the original claims are drawn to compositions and a method of controlling time, whereas newly submitted claims 45-58 are drawn to a process and a product by process.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 45-58 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03. Claims 40-44 will be examined in this Office action.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 40-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Regarding claims 40-44, the phrase "having a pre-selected concentration" renders the claims indefinite, because it is not clear what is the amount of the pre-selected concentration claimed according to the invention.

NOT AVAILABLE COPY

Art Unit: 1615

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishiguro et al. (U.S. Patent 5,521,089).

Ishiguro et al. provides a process for producing microcapsules utilizing yeast cell wall comprising glucan, mannan and chitin (See col. 2, lines 35-60). Ishiguro et al. teaches that the yeast cell wall can be dissolved by enzymes, and the degree of dissolution can determine the physical strength and/or film characteristics, such as the speed of release from the microcapsule, of the material (See col. 3, line 46 to col. 4, line 14). Ishiguro et al. teaches that the optimal pH for many enzymes is 4-9 and termination of the reaction can be carried out by several methods, including adjustment of pH (See col. 4, lines 15-32). Ishiguro et al. teaches that the yeast cell residues may be dispersed in aqueous solutions and may enclose hydrophobic liquids, such as oils (plasticizers) (See col. 5, lines 10-32). Ishiguro et al. teaches that the microcapsules are used for cosmetics, medicines, food, feeds and chemicals (See col. 5, lines 36-39).

Thus, Ishiguro et al. provides a method for controlling the release of encapsulated material from yeast cell wall microcapsules by determining the degree of dissolution of the yeast cell wall.

Ishiguro et al. does not specifically mention treating the yeast cell wall fractions with an acidic solution, however, it contemplates terminating the enzymatic reaction by adjusting the pH, which may include acidifying the reaction solution.

BEST AVAILABLE COPY

Art Unit: 1615

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teachings of Ishiguro et al. to devise a method for controlling the time at which a coated material begins to dissolve. The expected result would have been a successful method to provide controlled release formulations. Because of the teachings of Ishiguro et al., that the degree of dissolution can determine the physical strength and/or film characteristics of the formulations, one of ordinary skill in the art would have a reasonable expectation that the method claimed in the instant application would be successful. Therefore the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

#### *Response to Arguments*

7. Applicant's arguments with respect to claims 15-39 have been considered but are moot in view of the new ground(s) of rejection.

#### *Conclusion*

8. Claims 40-44 are rejected.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

**BEST AVAILABLE COPY**

Art Unit: 1615


MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liliana Di Nola-Baron whose telephone number is 703-308-8318. The examiner can normally be reached on Monday through Thursday, 5:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on 703-308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3592 for regular communications and 703-305-3592 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1234/ 1235.

October 20, 2002

  
THURMAN K. PAGE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

BEST AVAILABLE COPY